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REMARKS

The present Amendment is submitted in support of a Request For Continued Examination, includes cancellation of original claims 1-5 and adding new claim 6 to distinguish even more clearly over the previously cited prior art, including the latest citation, U. S. Patent No. 6,141,372 to Chalmers.

Chalmers' patent describes a digital down converter and polyphase non recursive (FIR) that simultaneously filters and down samples a single spread spectrum spectral band to base band. This digital down converter (Fig.4, item 408) uses a digital mixer external to the filter (Fig. 5, items 508 and 510) to perform the spectral translation and a separate polyphase filter (Fig. 5, item 501) to perform the band width reduction and sample rate reduction. The filter in Chalmers does not participate in the spectral translation. The filter in Chalmers outputs a single complex (I and Q) time series.

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New Claim 6 recites a linear phase recursive filter IIR), a significantly different structure than a FIR filter or a conventional IIR (that has non uniform phase). The equal ripple referred to in a FIR filter is a description of its magnitude response. The equal ripple referred to in the linear phase IIR filter is a description of its group delay (or phase slope). These are very different properties and are implemented in very different structures. The filter in claim 6 simultaneously performs spectral translation, bandwidth reduction, and sample rate change for each of the multiple spectral regions comprising the composite signal. The filter in Harris' new Claim 6 outputs multiple complex (I and Q) time series, one for each of the spectral components in the composite signal. Accordingly, it is respectfully contended that the structure set forth in Claim 6 is neither anticipated nor taught by Chalmers, either singly or combined with any other prior art, and therefore is allowable.

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